

202
5.4

HW

p264 15-35 odd 38, 41, 43

15

$$2 + 6 < 11 \text{ No}$$

17

$$13 + 16 = 29 \text{ no}$$

19

$$9 + 20 > 21 \text{ yes}$$

21

$$17 + 30 > 30 \text{ yes}$$

23

$$.9 + 4 > 4.1 \text{ yes}$$

25

$$.18 + .21 < .52 \text{ no}$$

27

$$7 + 9 \quad 2 < x < 16$$

29

$$12 + 18 \quad 6 < x < 36$$

31

$$32 + 61 \quad 29 < x < 93$$

33

$$64 + 88 \quad 24 < x < 152$$

35

$$75 + 75 \quad 0 < x < 150$$

38

$$G: \angle B \cong \angle ACB$$

$$P: AD + AB > CD$$

St

$$(1) \sim$$

$$(2) \overline{AB} \cong \overline{AC}$$

$$(3) AD + AC > CD$$

$$(4) AB = AC$$

$$(5) AD + AB > CD$$

Reasons A

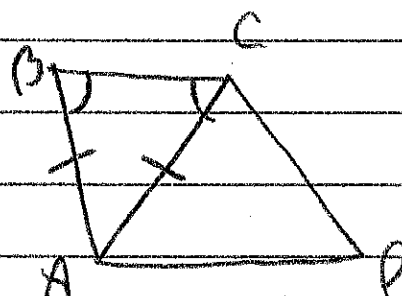
$$(1) \text{ Given}$$

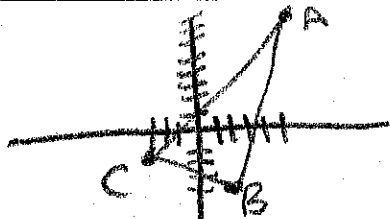
$$(2) \text{ Conv. } \angle \text{ thm}$$

$$(3) \Delta \text{ Ineq thm}$$

$$(4) \text{ def } \cong$$

$$(5) \text{ Subst}$$





41. $A(5, 8)$

$B(2, -4)$

$C(-3, -1)$

yes

$$AB = \sqrt{3^2 + 12^2}$$

$$\sqrt{153} \approx 12.37$$

$$BC = \sqrt{5^2 + (-3)^2}$$

$$\sqrt{34} \approx 5.8$$

$$12.04 + 5.8 > 12.37$$

yes ✓

$$AC = \sqrt{8^2 + 9^2}$$

$$\sqrt{145} \approx 12.04$$

43. $X(9, -8)$

$$XY = \sqrt{16^2 + (-4)^2}$$

$$\sqrt{272} \approx 16.49$$

$Y(16, -12)$

$Z(28, -15)$

$$YZ = \sqrt{12^2 + (-3)^2}$$

$$\sqrt{153} \approx 12.37$$

$$XZ = \sqrt{28^2 + (-7)^2}$$

$$\sqrt{833} \approx 28.86$$

$$16.49 + 12.37 = 28.86$$

Not a Δ